Appl. No. 10/658,823
Amdt. dated May 15, 2006
Reply to Office Action of March 15, 2006

Listing of Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Claims 1-35 (Cancelled)

36. (Previously Presented) A method of identifying an inhibitor of a glycosyltransferase that transfers a monosaccharide from a sugar nucleotide to an acceptor substrate, the method comprising contacting the glycosyltransferase, an acceptor substrate, and a donor substrate with a hydrophobic, non-carbohydrate test compound that inhibits interaction of a sugar with hydrophobic amino acids in the active site of the glycosyltransferase and determining the degree to which the activity of the glycosyltransferase is inhibited in the presence of the test compound.

37. (Previously Presented) The method of claim 36, wherein the activity of the glycosyltransferase is determined using an antibody that is specifically immunoreactive with a product of the reaction catalyzed by the glycosyltransferase.

38. (Previously Presented) The method of claim 37, which is an ELISA format.

39. (Previously Presented) The method of claim 36, wherein the glycosyltransferase is expressed in a recombinant cell.

40. (Previously Presented) The method of claim 36, wherein the donor substrate or acceptor substrate is labeled.

41. (Previously Presented) The method of claim 40, wherein the label is a radioactive label.

42. (Previously Presented) The method of claim 41, which is a radioactive column assay.

43. (Previously Presented) The method of claim 40, wherein the label is a fluorescent label.

44. (Previously Presented) The method of claim 36, wherein the glycosyltransferase is a fucosyltransferase.

45. (Previously Presented) The method claim 36, wherein the glycosyltransferase is a sialyltransferase.

46. (Previously Presented) The method claim 36, wherein the glycosyltransferase is an *N*-acetylglucosaminyltransferase.

47. (Previously Presented) The method of claim 36, wherein the compound comprises an aromatic or aliphatic ring structure.

48. (Previously Presented) The method of claim 36, wherein the compound comprises an aryl moiety.

49. (Previously Presented) The method claim 36, wherein the compound comprises a heteroaryl moiety.

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50. (Currently Amended) The method of claim ~~25~~ 49, wherein the heteroaryl moiety is selected from the group consisting of a thiophene, pyridine, isoxazole, phthalimide, pyrazole, indole, quinoline, phenothiazine, carbazole, benzopyranone, and a furan group.